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Date: June 24, 1999
Refer to: EM/ER:99-150

Mr. James Bearzi
NMED-HRMB
P.O. Box 26110
Santa Fe, NM 87502

SUBJECT: PRESENTATION SUMMARY OF TA-53-1 (MPF-1) SUMP & TANK, PRSs 53-007(a)/53-006(f)

Dear Mr. Bearzi:

Per the request of your staff at the June 16, 1999 monthly meeting, the Los Alamos National Laboratory's (LANL's) Environmental Restoration (ER) Project is forwarding a copy of the summary of information that was presented at the meeting associated with the sump and holding tank (Potential Release Sites [PRS] 53-007[a]/53-006[f]). The sump and holding tank are located in the basement of TA-53-1 (MPF-1). Because these PRSs were not part of the radioactive liquid waste (RLW) system at TA-53, they were not included as part of the Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) Work Plan (WP)/Sampling and Analysis Plan (SAP) for TA-53 Surface Impoundments and the TA-53 SAP Addendum. Additionally, at the May 19, 1999 monthly meeting, your staff requested copies of waste profile forms and supporting data associated with the sump and tank. This request has been forwarded to LANL's Hazardous and Solid Waste Group (ESH-19), which will address operational and waste management issues associated with the sump and tank.

If you have any questions or concerns please feel free to call Dave McInroy at (505) 667-0819 or Joe Mose at (505) 667-5808.

Sincerely,

Julie A. Canepa, Program Manager
LANL/ER Project

Sincerely,

Theodore J. Taylor, Program Manager
DOE/LAAO

JC/TT/VR/gt

Enclosure: Summary of Information

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TA-53-1 (MPF-1) Basement Tanks
PRSs 53-007(a) and 53-006(f)
June 16, 1999

Site Description

- SWMU Report identifies a tank used for neutralization of liquid waste and an overflow sump as PRS 53-007(a). SWMU Report also identifies a tank used to store radioactive liquid waste as PRS 53-006(f). The overflow sump of PRS 53-007(a) and the tank identified as PRS 53-006(f) are the same structure.
- To avoid confusion associated with the tank having two PRS numbers, the OU 1100 Work Plan (p. 6-2) designates the neutralization tank only as PRS 53-007(a) and the sump (or holding tank) as PRS 53-006(f).

Operating History

- OU 1100 Work Plan (p. 6-2) describes the neutralization tank [PRS 53-007(a)] and sump [PRS 53-006(f)] located in the basement of D Wing of Building TA-53-1 (MPF-1) as follows:
  - PRS 53-007(a) received discharge from the radiochemistry laboratories located in D Wing of Building TA-53-1 (MPF-1) (including eight cup drains, an emergency eye wash/shower drain, and a floor sink drain).
  - After neutralization using caustic (NaOH) in PRS 53-007(a), liquids were drained to a holding tank [PRS 53-006(f)].
  - Liquids from PRS 53-006(f) was then pumped into trucks located on an outdoor transfer pad (south of D Wing) and transported to an appropriate treatment or disposal facility.
- OU 1100 Work Plan proposes PRS 53-007(a) for No Further Action (p. 6-2) based on no evidence of any release exists and that any release would be contained within the basement of TA-53-1.
- OU 1100 Work Plan proposes PRS 53-006(f) for Deferred Action (p. 6-32) based on any potential release beneath the building would not pose an unacceptable current risk.
- Information from TA-53 personnel indicates that user groups of the radiochemistry laboratories in D-Wing changed periodically (every couple of years). The sump and the holding tank have been out-of service since August 1996.

Additional Information

- PRSs 53-007(a) and 53-006(f) were never intended to be used for treatment and/or storage of hazardous waste.
- However, a September 1990 NMED RCRA Inspection identified the tank in the basement of Building TA-53-1 as a potential problem because mercury from a spill in one of the D Wing laboratories connected to the tanks may have drained into the tank(s). Subsequent characterization (sampling) and classification of the contents of both tanks indicated the presence of mixed waste (F001, F002, F003, F005, and D002)]. As a result:
  - tanks were pumped out (for disposal off-site) and steam-cleaned
  - all drain traps leading to the PRS 53-007(a) were cleaned out
  - stainless-steel liner placed in PRS 53-007(a)
  - piping between tanks [PRSs 53-007(a) and 53-006(f)] was replaced with stainless-steel piping
  - SOPs developed and implemented to ensure that only non-hazardous liquids entered tanks
  - Report summarizing the sequence of events was submitted to NMED

- TA-54 database search (including WPFs from 1993 to present) shows two WPFs from tank(s) classifying waste as either hazardous (1993 – F002 and F005) or mixed (1996 - F002, D006, and D007). These wastes were shipped off-site for disposal (OSCO and DSSI).

- TA-54 database search (including WPFs from 1993 to present) shows four WPFs from tank(s) classifying waste as non-hazardous low-level waste. These wastes were transported to the radioactive liquid waste lagoon(s) or TA-50.

- WPFs and associated data have been obtained and are currently being reviewed to ensure that data packages are complete. They will be submitted to NMED-HRMB by ESH-19, which will address all operational and waste management processes of the tank and sump.